

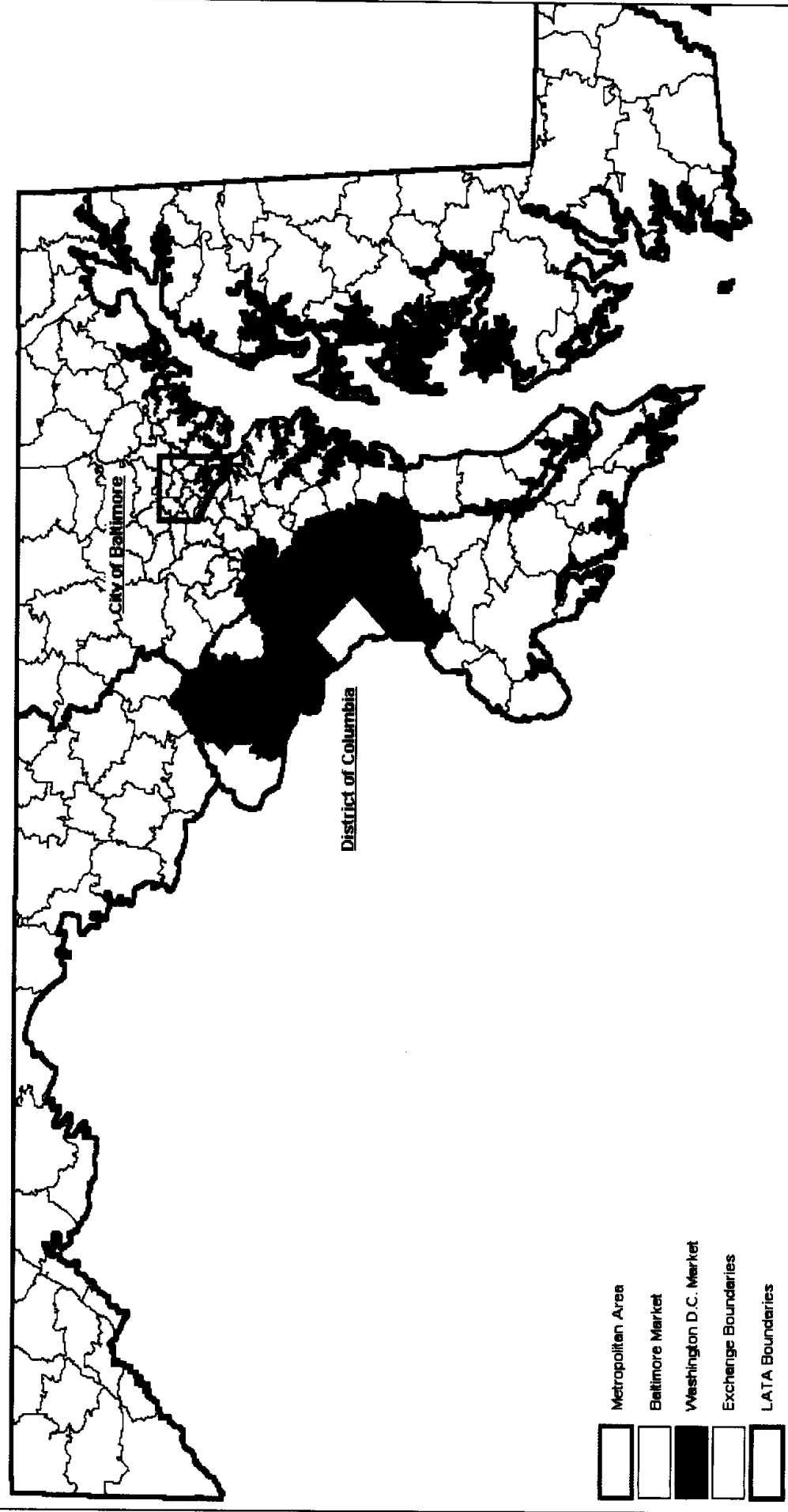
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Baltimore

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COMMISSIONERS OF THE PUBLIC SERVICE COMMISSION OF MARYLAND

Metropolitan Area
Baltimore Market
Washington D.C. Market
Exchange Boundaries
LATA Boundaries





COMMENTS OF THE PUBLIC SERVICE COMMISSION OF MARYLAND

**Before the
Federal Communications Commission
Washington, D.C. 20554**

IN THE MATTER OF)	
<i>Unbundled Access to Network Elements</i>)	WC Docket No. 04-313
<i>Review of the Section 251 Unbundling</i>)	
<i>Obligations of Incumbent Local Exchange</i>)	CC Docket No. 01-338
<i>Carriers</i>)	

AFFIDAVIT OF JERRY HUGHES

I, Jerry Hughes, hereby make oath that the following facts, as set forth in this affidavit, are true to the best of my knowledge, information and belief.

1. I am over eighteen years of age, and am competent to testify and have personal knowledge of the facts as set out in this Affidavit.

2. I am an Assistant Director of Telecommunications of the Staff of the Maryland Public Service Commission. My business address is 6 St. Paul Street, Baltimore, Maryland 21202.

3. I was a witness in Case 8983 before the Maryland Public Service Commission ("MDPSC") captioned *In the Matter of the Implementation of the Federal Communication Commission's Triennial Review Order*.

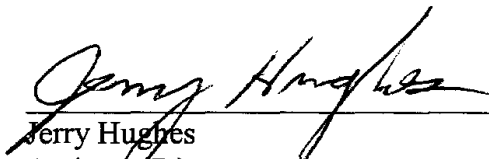
4. On March 12, 2004, I filed direct testimony in Case 8983 on behalf of the MDPSC Technical Staff.

5. On March 16, 2004, the Maryland Public Service Commission stayed Case 8983.

6. I affirm that the above-referenced pre-filed testimony was drafted by me or under my supervision and is true and accurate.

7. I prepared portions of the Summary of the Maryland Public Service Commission Staff's Impairment Analysis filed in the above-captioned matter and reviewed the entire document. I affirm that the Summary accurately summarizes the testimony I prepared for Case 8983.

I hereby declare under penalty of perjury that the foregoing Affidavit signed this 29th day of September, 2004, is true and correct to the best of my knowledge.


Jerry Hughes
Assistant Director
Telecommunications Division
Public Service Commission of Maryland
6 St. Paul Street, 16th Floor
Baltimore, Maryland 21202

STATE OF MARYLAND)
) TO WIT:
CITY OF BALTIMORE)

I HEREBY CERTIFY that on this 29 day of September, 2004, before me, a Notary Public for said State and City, personally appeared the affiant and made oath in due form of law that the matters and facts hereinabove set forth are true to the best of her knowledge, information and belief.


NOTARY PUBLIC

My Commission Expires: 3/1/07

**BEFORE THE
PUBLIC SERVICE COMMISSION
OF MARYLAND**

**IN THE MATTER OF THE IMPLEMENTATION
OF THE FEDERAL COMMUNICATIONS
COMMISSION'S TRIENNIAL REVIEW ORDER**

*

CASE NO. 8983

PUBLIC VERSION

TESTIMONY

OF

KEVIN MOSIER

**ON BEHALF OF THE STAFF
OF THE
PUBLIC SERVICE COMMISSION OF MARYLAND**

March 12, 2004

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1 **INTRODUCTION**

2
3 **Q. WHAT IS YOUR NAME, TITLE AND BUSINESS ADDRESS?**

4
5 A. My name is Kevin Mosier. I am a Regulatory Economist in the
6 Telecommunications Division of the Public Service Commission of
7 Maryland. My business address is 6 St. Paul Street, Baltimore, MD
8 21202.

9
10 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE**
11 **IN REGULATED INDUSTRY?**

12
13 A. See Attachment KDM-A.

14
15 **DEFINITIONS AND BACKGROUND**

16
17 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

18
19 A. On August 21, 2003, the Federal Communications Commission ("FCC")
20 issued its Triennial Review Order ("TRO")¹. In the TRO, the FCC states
21 that "requesting carriers are impaired without access to unbundled local

¹ In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket 01-338, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking (rel. August 21, 2003) ("TRO")

1 circuit switching when serving mass market customers.”² However, the
2 FCC stated that this finding is subject to a further review by states, if a
3 party petitions the state to overturn the impairment finding. This further
4 review is designed to find out if, in specific geographic markets in each
5 state, carriers would not be impaired without access to unbundled local
6 circuit switching when serving mass-market customers. This is
7 accomplished by a two-step process. First, states must apply self-
8 provisioning and wholesale triggers to a particular market. If the triggers
9 are not satisfied, the FCC requires states to perform the second step of
10 the analysis. Here the state must evaluate additional operational and
11 economic criteria in order to determine if conditions in the market are
12 conducive to competitive entry even without access to unbundled mass
13 market circuit switching, notwithstanding failure to meet either of the
14 triggers. At this point, I will only be addressing the trigger analysis.

15
16 The FCC made a finding that a requesting carrier is “impaired when lack
17 of access to an incumbent LEC network element poses a barrier or
18 barriers to entry, including operational and economic barriers, that are
19 likely to make entry into a market uneconomic.”³ The impairment
20 analysis is to be done via the use of certain “triggers” set forth by the TRO.
21 The purpose of my testimony is to analyze the available evidence, and

² TRO, ¶ 419.

³ TRO, ¶ 84.

1 provide to the Commission a recommendation on whether or not these
2 triggers for mass market circuit switching have been met.

3
4 **Q. PLEASE DESCRIBE MASS MARKET CIRCUIT SWITCHING AS IT**
5 **PERTAINS TO THE IMPAIRMENT ANALYSIS?**

6
7 A. Circuit switching consists of line-side and trunk-side facilities, along with
8 the features and functions associated with the switch, the most important
9 being the basic function of connecting lines and/or trunks. The FCC
10 defines the mass market as "consist[ing] primarily of consumers of analog
11 "plain old telephone service" or "POTS" that purchase only a limited
12 number of POTS lines and can only economically be served via analog
13 DS0 loops."⁴ The FCC also states that mass market customers are those
14 customers "consist[ing] of residential customers and very small business
15 customers,"⁵ while further noting that very small business customers may
16 in some cases be included with enterprise customers.⁶ For the purpose of
17 the impairment analysis, mass market circuit switching will consist of the
18 provisioning of switching services to residential customers, and business
19 consumers with a very small number of 2 wire analog loops.⁷

20 The FCC also required the states to determine a cross over point where it
21 might be more cost effective for a business customer to order a single

⁴ TRO, ¶ 459.

⁵ TRO, ¶ 127.

⁶ TRO, fn 432.

⁷ Some parties refer to the 2 wire analog loop as a DS0 or DS0 equivalent loop circuit.

1 DS1 loop to serve it needs than it would be for that same customer to use
2 a certain number of 2 wire analog loops. This cross over point is
3 important, because a customer who could be served cost effectively via a
4 DS1 loop should probably be considered as part of the enterprise market.
5 Staff witness Douglas Dawson provided analysis showing that the cross
6 over point is seven lines. Therefore, I will generally define the mass
7 market for switching as consisting of residential and business customers
8 with 6 or fewer 2 wire analog loops.

9
10 **Q. PLEASE DESCRIBE THE FCC'S MASS MARKET TRIGGER**
11 **ANALYSIS?**

12
13 **A.** The FCC set forth two methods for measuring impairment for mass market
14 circuit switching. The first is a self-provisioning trigger, which requires that
15 three or more carriers that are unaffiliated with Verizon or each other, be
16 serving customers in that market with their own switches. The second is a
17 competitive wholesale facilities trigger, which requires that two or more
18 competing carriers that are unaffiliated with Verizon or each other, be
19 offering wholesale switching service in that market using their own switch.

20
21 **Q. WHAT PART OF THE TRO ANALYSIS WILL YOU BE PERFORMING?**
22

1 A. At this point in the TRO process, I will only be addressing the portions of
2 the impairment analysis addressed by Verizon Maryland Inc. ("Verizon") in
3 its testimony filed on October 31, 2003. In its testimony, Verizon provided
4 its case for non-impairment based on the fact that it believed the self
5 provisioning trigger was met for the Washington and Baltimore
6 Metropolitan Statistical Areas ("MSAs"). Verizon did not attempt to make
7 the case for the competitive wholesale facilities trigger.

8
9 **IMPAIRMENT ANALYSIS**

10
11 **Q. WHAT DATA DID YOU RELY ON FOR YOUR IMPAIRMENT**
12 **ANALYSIS?**

13
14 A. While I gleaned a significant amount of information from reviewing the
15 testimony, data requests, and responses to data requests from the other
16 parties, the majority of my analysis relies on the responses to both the
17 Commission's Census Data Request and the data requests from Staff.

18
19 **Q. PLEASE DESCRIBE THE CENSUS DATA REQUEST, AND EXPLAIN**
20 **WHAT INFORMATION WAS USED?**

21
22 A. On December 4, 2003, the Commission issued the Census Data Request
23 to all local exchange carriers authorized to provide service in Maryland.

1 This consisted of questionnaires pertaining to high capacity loops, mass
2 market switching, and dedicated transport. My testimony covers the
3 responses relating to mass market switching only. The relevant
4 information gleaned from the Census Data Request consists of the
5 following: the CLLI code of each switch used to provide service in
6 Maryland; the type of switch used; the number (if any) of single line
7 residential customers served by each switch; the number of business
8 customers and the corresponding total number of lines for customers in
9 the line categories of 0 to 6, 7 to 12, 13 to 18, 19 to 24, and 25 and above.
10 Staff requested the separation of business lines into the categories above
11 so it could evaluate and separate mass market business customers from
12 enterprise market customers.

13
14 **Q. PLEASE DESCRIBE THE APPLICABLE STAFF DATA REQUESTS,**
15 **AND EXPLAIN WHAT INFORMATION WAS USED?**

16
17 **A.** On November 21, 2003, Staff Data Request No. 1 was sent to Maryland
18 CLECs. The relevant questions for this testimony consisted of a listing of
19 all lines currently in service in Maryland sorted by switch name and
20 number of lines for local resale lines, UNE-P lines, and UNE-L lines; along
21 with a listing of all collocation sites in Maryland, sorted by type of facilities
22 that are used to connect to the Verizon network. In addition, Staff sent out

1 a number of data requests to individual carriers seeking clarification on the
2 type and number (if any) of customers served by that carriers own switch.
3

4 **Q. HOW DOES THE PROVISION OF RESALE AND UNE-P SERVICE**
5 **AFFECT THE IMPAIRMENT ANALYSIS?**
6

7 A. While neither resale or UNE-P service count toward the trigger for mass
8 market switching, these services may provide information about the
9 appropriate geographic markets, and how mass market customers are
10 being served. However, the actual impairment analysis preformed below
11 focuses solely on CLECs that self-provision their own switching.
12

13 **Q. WHICH COMPANIES ARE INCLUDED IN YOUR ANALYSIS?**
14

15 A. I include all the companies that provided responses to the census data
16 request. These companies include *****BEGIN PROPRIETARY END**
17 **PROPRIETARY*****. In addition, I analyzed data from *****BEGIN**
18 **PROPRIETARY END PROPRIETARY***** although none of these three
19 companies responded to the Census Data Request.
20

1 **Q. IN LIGHT OF THE FACT THAT ***BEGIN PROPRIETARY END**
2 **PROPRIETARY*** DID NOT RESPOND TO THE CENSUS DATA**
3 **REQUEST, WHY WERE THEY INCLUDED IN YOUR ANALYSIS?**

4
5 **A.** In its testimony, Verizon appeared to include these three companies in its
6 trigger analysis. I felt it was therefore appropriate to address whether or
7 not Verizon was correct to have included these companies as counting
8 toward the self-provisioning trigger.⁸

9
10 **Q. WHICH COMPANIES WERE ELIMINATED PRIOR TO THE**
11 **IMPAIRMENT ANALYSIS, AND WHY?**

12
13 **A. ***BEGIN PROPRIETARY END PROPRIETARY***** were eliminated first,
14 as they are both solely data providers and therefore are not providing
15 circuit switching. I then eliminated *****BEGIN PROPRIETARY END**
16 **PROPRIETARY***** as these carriers were exclusively providing service to
17 enterprise customers. I determined that *****BEGIN PROPRIETARY END**
18 **PROPRIETARY***** were only providing service to enterprise customers
19 based on their response to staff data requests in which each company
20 stated that it serves all of its customers via DS1 or higher facilities.⁹ The
21 FCC clearly defines DS1 and above customers as enterprise customers.¹⁰

⁸ Verizon also listed *****BEGIN PROPRIETARY END PROPRIETARY*****

⁹ See Attachment KDM-B

¹⁰ TRO, ¶ 45.

1 I determined that *****BEGIN PROPRIETARY END PROPRIETARY*****
2 was only providing service to enterprise customers based on its responses
3 to the Census Data Request, which clearly showed it was not serving
4 mass market customers.

5
6 **Q. SHOULD CABLE TELEPHONY PROVIDERS BE INCLUDED IN THE**
7 **TRIGGER ANALYSIS?**

8
9 A. No, I do not believe that cable telephony providers should be included in
10 the trigger analysis, so I would propose eliminating Jones, and Starpower.
11 The FCC left to the states to decide if intermodal providers should be
12 included in the trigger analysis.¹¹ I do not believe that cable telephony
13 providers should count toward the trigger because they provide little if any
14 evidence as to whether or not the market for mass market switching is
15 unimpaired. In ¶ 459 of the TRO, the FCC stated,

16 We find on a national basis, that competing carriers are impaired
17 without access to unbundled local circuit switching for mass
18 market customers. This finding is based on evidence in our record
19 regarding the economic and operational barriers caused by the cut
20 over process. These barriers include the associated non-recurring
21 costs, the potential for disruption of service to the customer, and
22 our conclusion, as demonstrated by our record, that incumbent
23 LECs appear unable to handle the necessary volume of migrations
24 to support competitive switching in the absence of unbundled
25 switching. These hot cut barriers not only make it uneconomic for
26 competitive LECs to self-deploy switches specifically to serve the
27 mass market, but also hinder competitive carriers' ability to serve
28 mass market customers using switches self-deployed to serve
29 enterprise customers.

¹¹ TRO fn. 1549.

1
2 Simply put, since cable telephony providers are not subject to the "hot cut"
3 process, they provide no evidence concerning the economic and
4 operational costs of that process, and whether or not a CLEC could
5 efficiently switch a customer from UNE-P to UNE-L. Moreover, since they
6 do not utilize Verizon's switched network, they provide no evidence
7 regarding other operational and economic barriers associated with using
8 the network.

9
10 In addition, in its discussion about the appropriateness of counting
11 intermodal providers such as cable telephony providers, the FCC implied
12 that such providers should be comparable to ILEC services in the level of
13 intermodal provider's "ubiquity."¹² And, as shown in *****BEGIN**
14 **PROPRIETARY END PROPRIETARY***** responses to the Census Data
15 Request and *****BEGIN PROPRIETARY END PROPRIETARY***** the
16 cable telephony providers clearly do not match the ILEC in ubiquity of
17 areas served.

18
19 Finally, cable telephone providers may not match the ILECs in terms of
20 quality and reliability. Cable telephony providers do not yet match the
21 ILEC in terms of E911 functionality. Further, as witnessed during
22 hurricane Isabelle, cable telephony providers are unable to maintain full
23 service in the event of major electrical outages.

1
2 **Q. PLEASE OFFER A SUMMARY OF YOUR METHODOLOGY FOR**
3 **PERFORMING THE IMPAIRMENT ANALYSIS?**

4
5 A. The beginning of this process is very straightforward. First, I reviewed the
6 testimony of Jerry Hughes in order to determine the appropriate
7 geographic markets for which the impairment analysis should be
8 preformed. The next step was to review the data to determine if the
9 remaining companies were operating in one, or both of the geographic
10 markets as defined by Jerry Hughes. Then I determined if these
11 companies met the requirements to count towards meeting the triggers in
12 either of the geographic markets. The final step in the impairment
13 analysis consisted of a simple counting exercise to determine if the trigger
14 had been objectively met in either or both markets.

15
16 **Q. WHAT ARE THE APPROPRIATE GEOGRAPHIC MARKETS?**

17
18 A. Staff witness Jerry Hughes determined that there were two appropriate
19 geographic markets in Maryland, the Washington market and the
20 Baltimore market. Attachment A shows these markets in detail.

21

¹² TRO fn. 1549.

1 **Q. DOES THE TRIGGER ANALYSIS CONSIST OF MORE THAN JUST A**
2 **SIMPLE COUNTING EXERCISE?**

3
4 A. Yes. The FCC "require[s] state commissions to find 'no impairment' in a
5 particular market when either trigger is satisfied, subject to the limitations
6 described below."¹³ Clearly therefore, there are criteria a CLEC must
7 meet in order to count toward the trigger, otherwise the FCC would not
8 have included these limitations. Since the purpose of the trigger analysis
9 is to show impairment, or the lack thereof, a simple counting exercise
10 without limitations would be of limited value.

11
12 **Q. WHAT CRITERIA DOES A CLEC NEED TO MEET IN ORDER TO BE**
13 **COUNTED TOWARDS THE TRIGGER?**

14
15 A. First of all, in order for a CLEC to count towards the trigger, the CLEC
16 must be "actively providing voice service to mass market customers in the
17 market."¹⁴ I interpret the FCC intent of the term "actively providing" as
18 meaning that a CLEC is both currently serving customers, and is actively
19 trying to acquire additional customers. Eliminating a CLEC that did not
20 meet these requirements would prevent counting a CLEC that, after
21 spending the resources to gain a very small number of mass market
22 customers, then decided it was no longer cost effective to acquire more, in

¹³ TRO ¶ 498.

1 which case the CLEC would eventually lose its customer base to churn.
2 Additionally, I believe it is necessary that a CLEC should be serving
3 residential customers, in addition to small business customers in order to
4 count toward the trigger. The FCC points out that while very small
5 business customers purchase similar services to residential customers,
6 they also pay higher rates and are more likely to order additional services.
7 It is for these reasons that the FCC found it may be appropriate to include
8 very small business customers with enterprise customers.¹⁵ The
9 reasoning behind this is sound. If a CLEC is offering service to a certain
10 small business customer that might ordinarily be included in the mass
11 market, but the CLEC is not serving a single residential customer, it
12 seems reasonable to assume that this CLEC considers these small
13 business customers to be more like enterprise customers. Further, a
14 CLEC should not count toward the trigger if is either offering service to
15 only a small geographic portion of the market, as such a CLEC would
16 provide little evidence as to the ability to serve throughout the market.

17
18 Finally, a CLEC should not count toward the trigger if it is only serving a
19 de minimus number of mass market customers. In its own finding of
20 impairment on a national basis, the FCC pointed out that "there has been
21 only minimal deployment of competitive LEC-owned switches to serve

¹⁴ *TRO* ¶ 499.

¹⁵ *TRO* fn. 432.

1 mass market customers."¹⁶ Counting a CLEC with a de minimus number
2 of mass market customers towards the trigger would not only contradict a
3 common sense analysis, but would ignore the FCC's own reasoning on
4 impairment.

5
6 In the absence of evidence that a CLEC is actively marketing its service to
7 both very small business and residential customers over a significant
8 portion of the market, it is difficult to believe that such a CLEC has in fact
9 overcome the economic and operational cost that led to a national finding
10 of impairment.

11
12 Finally, a CLEC that is serving a very small number of mass market
13 customers on an incidental basis by providing switching via an enterprise
14 architecture should not be counted toward the trigger.¹⁷

15
16 **Q. EXPLAIN THE DISTINCTION BETWEEN AN ENTERPRISE AND MASS**
17 **MARKET ARCHITECTURE?**

18
19 **A.** Mass market customers are exclusively served via analog loops that
20 require the use of an embedded ILEC 2 wire loop,¹⁸ whereas enterprise
21 customers are served primarily, if not exclusively on digital loops or lines.

¹⁶ TRO ¶ 422.

¹⁷ TRO ¶¶ 441 and 508.

¹⁸ This pertains to CLECs offering service via Verizon unbundled loops.

1 As the FCC has noted, there are likely significant upgrades required to
2 modify a switch currently only serving enterprise customers. The
3 enterprise to mass market upgrade requires a CLEC to "purchase and
4 install analog-capable equipment; increase the existing collocation cage
5 space; and pay Verizon for additional cabling and power."¹⁹

6
7 **Q. DO YOU HAVE A CHART THAT SUMMARIZES YOUR TRIGGER**
8 **ANALYSIS?**

9
10 **A.** Yes, the following chart summarizes my analysis.

11 *****BEGIN PROPRIETARY**

12
13 **END PROPRIETARY*****

14
15 **Q. PLEASE EXPLAIN HOW YOU DETERMINED THAT ***BEGIN**
16 **PROPRIETARY END PROPRIETARY*** ONLY SERVE A DE MINIMUS**
17 **NUMBER OF MASS MARKET CUSTOMERS IN MARYLAND VIA THEIR**
18 **OWN SWITCH.**

19
20 **A.** In its response to the Census Data Request, *****BEGIN PROPRIETARY**
21 **END PROPRIETARY***** Maryland customers served by 6 or fewer lines,
22 and *****BEGIN PROPRIETARY END PROPRIETARY***** Maryland

¹⁹ TRO fn. 1353.

1 customers served by 6 or fewer lines. According to the testimony of John
2 R. Gilbert and Carlo Michael Peduto, III, *****BEGIN PROPRIETARY END**
3 **PROPRIETARY***** mass market lines in Maryland, while *****BEGIN**
4 **PROPRIETARY END PROPRIETARY***** mass market lines in Maryland.
5 Given that there are approximately 4 million lines in Maryland, it is very
6 clear that these numbers are de minimus.

7
8 **Q. PLEASE EXPLAIN HOW YOU DETERMINED THAT ***BEGIN**
9 **PROPRIETARY END PROPRIETARY*** DO NOT SERVE ANY**
10 **RESIDENTIAL CUSTOMERS IN MARYLAND VIA THEIR OWN**
11 **SWITCH.**

12
13 **A.** In their responses to the Census Data Request, none of these companies
14 reported serving residential customers via their own switch. In addition, in
15 its testimony *****BEGIN PROPRIETARY END PROPRIETARY***** clearly
16 stated that it does not offer service to residential customers via its own
17 switch.

18
19 **Q. DO YOU BELIEVE THAT ***BEGIN PROPRIETARY END**
20 **PROPRIETARY*** MEETS THE REQUIREMENTS TO COUNT**
21 **TOWARDS THE TRIGGER?**

1 A. Since *****BEGIN PROPRIETARY END PROPRIETARY***** did not
2 respond to the Census Data Request, I lack enough evidence to
3 determine categorically if this company should count toward the trigger.
4 In its response to Staff Data Request No. 1, *****BEGIN PROPRIETARY**
5 **END PROPRIETARY***** UNE-L lines in Maryland. While I do not know
6 how many of these lines are serving mass market customers, based on
7 the testimony of John R. Gilbert and Carlo Michael Peduto, III, it appears
8 that *****BEGIN PROPRIETARY END PROPRIETARY***** could count
9 toward the trigger in both the Baltimore and Washington markets, and in
10 the absence of a response to the Census Data request, I would be
11 inclined to agree with Verizon's assessment. It should be noted that
12 counting *****BEGIN PROPRIETARY END PROPRIETARY***** towards
13 meeting the self-provisioning trigger requirements is still insufficient to
14 actually meet the trigger for non-impairment.

15
16 Q. HOW DOES THE *****BEGIN PROPRIETARY END PROPRIETARY*****
17 **RESPONSE TO STAFF DATA REQUEST NO. 2 THAT IT PROVIDES**
18 **ITS SERVICES TO CUSTOMERS VIA VERIZON LOOPS AFFECT THE**
19 **YOUR CONCLUSION THAT ***BEGIN PROPRIETARY END**
20 **PROPRIETARY*** SHOULD NOT BE ONE OF THE CLECS THAT**
21 **SATISFIES THE SELF-PROVISIONING TRIGGER?**
22